DEPARTMENT OF ENVIRONMENTAL CONSERVATION AIR QUALITY CONTROL OPERATING PERMIT ADMINISTRATIVE AMENDMENT TO INCORPORATE MINOR PERMIT CONDITIONS

Permit No. AQ0741TVP01 Application No. 741

Revision 2: January 16, 2008

Expiration Date: April 16, 2011

Issue Date: April 17, 2006

The Department of Environmental Conservation, under the authority of AS 46.14, 18 AAC 50.326, and 40 C.F.R. 71.7(d)(1)(v) incorporates the provisions of AQ0741MSS01 Revision 1, issued August 6, 2007, into Operating Permit AQ0741TVP01 by administrative amendment.

This permit is issued to Pacific Energy Resources Ltd for the Kustatan Production Facility.

This action is a final action for the purposes of establishing an operating permit shield under 40 C.F.R. 71.7(d)(4).

John F. Kuterbach, Manager

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Air Permits Program

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Changes due to Minor Permit No. AQ0741MSS01 Revision 1

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The following conditions of Operating permit No. AQ0741TVP01, listed in Column 1 of this Table are	
replaced by the conditions of Minor Permit No. AC	`
Column 1	Column 2
Operating Permit Condition	Minor Permit Condition
Condition 1.1- Assessable emissions	New assessable emissions are 262 TPY ^a .
Table 1- Emission Unit inventory	Table 1 ^b - Emission Unit Inventory excluding storage
	tanks and EU10a. Insert EU 9a, Delete EU 11
Condition 3 - Visible emissions (VE) monitoring	Condition 9 ^{c,d} - Include EU 9a for VE monitoring
Condition 4 -Particulate matter (PM) monitoring	Condition 10° - Include EU 9a for PM monitoring
Condition 5 - Sulfur dioxide (SO ₂) monitoring	Condition 11 ^c - Include EU 9a for SO ₂ monitoring
Condition 5.4 - Monitoring fuel oil consumption for	
the firewater pump	
Condition 5.6 - Fuel gas H ₂ S monitoring	Rescinded
Condition 5.7 - Calculating fuel consumption	Rescinded
Condition 5.8 - Calculating and recording SO ₂	Rescinded
Condition 5.9 - Recordkeeping fuel gas H ₂ S content	
Condition 5.10 - Reporting fuel gas H ₂ S content	Rescinded
None	Condition 2- New condition to establish and maintain
	an ambient boundary
Condition 6 and Table 2 - Fuel oil sulfur limit and	Condition 3.1- Revised to 0.5 percent fuel oil sulfur
monitoring	content (from 0.25 percent)
Table 2-Fuel gas H ₂ S limit for turbines, heaters and	
flare	Resemded
Condition 6.1-Monitoring fuel sulfur	Conditions 3.1.1, 3.1.2, 3.1.2.1, 3.1.2.2, 3.1.3 and 3.2
Condition 7.1- Monitoring firewater pump hours	Rescinded
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Condition 7.3 - Recording VOC for wet gas service	
Condition 7.2 – Monitoring and recording gas flared in EU 10	Condition 5.5 – Use flow totalizers accurate to ±10%
Condition 7.6- Reporting operating hours for EU 9	Conditions 5.6, 5.6.1 and 5.6.2 for reporting gas flared
(firewater pump) and reporting fuel burned in EU	in EU 10 and reporting CO emissions for EUs 1, 2 and
10° (flare)	2a. Reporting operating hours for EU 9 rescinded
	A V A
Table 3- Load limits for 1, 2 and 2a	Conditions 4.1, 4.1.1 and 5.3
Table 3- EU 9 (firewater Pump) 208 hour	Rescinded
operational limit	
Table 3- EU 10 (flare) fuel consumption limit	Condition 5.2 - New limit of 70 MMscf (from 38.7 tpy)
Table 3- Facility wide VOC monitoring	Rescinded
Condition 8.1-Calculating NO _X and CO	Condition 4.2, 4.2.1 and 5.4.2
Condition 8.1a -Verifying NO _X and CO emission	Condition 4.2.2
factors	Condition 4.2.2
Conditions 8.1b, 8.1b(i), 8.1b(i)(A)&(B),	Rescinded
8.1b(ii)(A)&(B), 8.1c, 8.1d and 8.1e-Monitoring for	
EUs 3-8	Condition 4.2.2 and 5.6.1 P
Condition 8.3-Reporting NO _X and CO for EUs 1-8	Condition 4.2.3 and 5.6.1 – Reporting NO _X and CO for
G 15: 0.434 5: 2700:	EUs 1, 2 and 2a. Reporting for EUs 3-8 rescinded
Condition 8.4-Monitoring VOC in process valves,	Rescinded
flanges etc	
Table 4- NO _x limit for EU 1, 2 and 2a (turbines)	Conditions 4.1.2 -Revised to 55 tpy (from 149 tpy)

Table 4-NO _X limit for EUs 3-8 (heaters and heater treaters)	Rescinded
Table 4-CO limit for EUs 1, 2 and 2a (turbines)	Condition 5.1- Revised to 136 tpy (from 150 tpy combined total for EUs 1-8)
Table 4-CO limit for EUs 3-8 (heaters and heater treaters)	Rescinded
Table 4- CO emissions EU 10 (flare)	Rescinded
Table 4 -VOC limit for process valves, flanges, compressors and open ended lines	Rescinded
Condition 9, 9.1, 9.2, 9.3 and 9.4- Monitoring SO ₂ emissions	Rescinded
Condition 8.1a – Source testing EUs 1, 2 and 2a to verify NO _x and CO emission rates	Condition 5.4 and 5.4.1
None	Condition 5.4.2 - New EU 1, 2 and 2a, CO monitoring
None	Condition 4.4 - New hour limit for backup generator (EU 9a)
None	Condition 4.5 - New condition for monitoring backup generator (EU 9a) hours
None	Condition 4.6 - New condition for reporting hours of operations for EU 9a

Notes:

^a The assessable emissions for Minor Permit AQ0741MSS01 Rev. 1 is shown in Table 2-1 of the Technical Analysis Report for the permit.

^b The storage tanks and space heaters (EU10a) listed in Table 1 of the minor permit are insignificant emission units under 18 AAC 50.326(e) for Title V monitoring. These units will not be listed in the operating permit.

^c EU 10a is listed in Conditions 9, 10 and 11 of the minor permit subject to VE, PM and SO₂ standards. Unit 10a will not be included for Title V monitoring.

^d The "more than three minutes in any one hour" listed in Condition 9 of the minor permit and Condition 3 of the operating permit is no longer effective since the Air Quality Control Package is now adopted by the U.S. EPA.

^e Condition 7.6 of Permit No. AQ0741TVP01, erroneously referenced EU8 (Crude oil heater) instead of EU 10 (Process flare) required to report gas flared. Conditions 5.5, 5.6 and 5.6.2 in the minor permit will replace Condition 7.6 of Permit No. AQ0741TVP01 and will eliminate the error.